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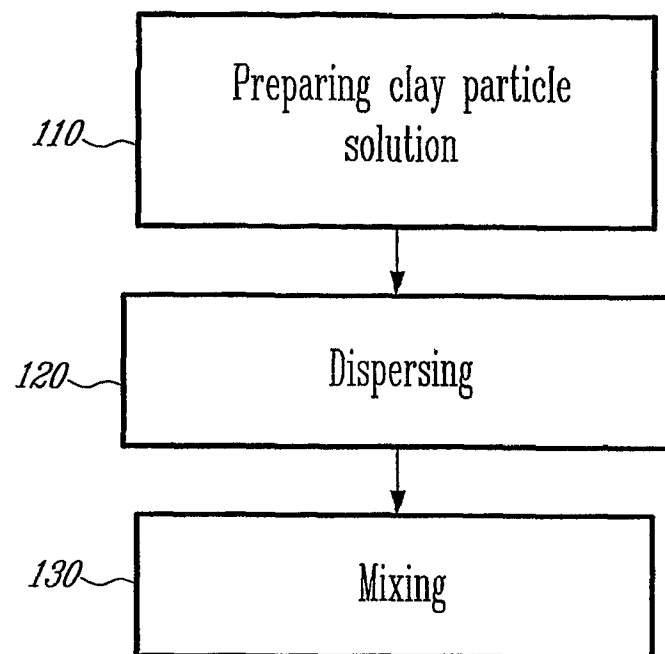
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(54) Title: METHOD AND SYSTEM FOR MAKING HIGH PERFORMANCE EPOXIES, AND HIGH PERFORMANCE EPOX-
IES OBTAINED THEREWITH



(57) Abstract: A method comprising preparing a solu-
tion of clay particles solution, submitting the solution of
clay particles first to a high pressure and high velocity
flow for shearing the particles in the solution of clay par-
ticles, and to a sudden lower pressure, whereby the parti-
cles explode into the mist of the solution of clay particles,
and mixing the finely dispersed clay solution, whereby
epoxy is introduced in the solution of clay particles dur-
ing on of the above steps of preparing the solution of clay
particles or dispersing the solution of clay particles or to
the resulting dispersed solution of clay particles, yield-
ing an extremely fine and homogeneous distribution of
the particles of nanodimensions in the epoxy, yielding a
high-performance nanocomposite epoxy.

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